☐ Cargo piping — 46 CFR 56.30

- Expansion joints — 46 CFR 56.35
- Controls
- Supports
- Hoses-drip pans
- Valves — 46 CFR 56.20

☐ Cargo tank venting — 46 CFR 70.05-30, 46 CFR 90.05-35, MSM Ch. 10.C.4

Independent PV valves

Independent goosenecks

- Flame screen
- Closure device

☐ Explosion-proof fixtures — 46 CFR 111.105

☐ Independent tanks, fixed, portable, or marine portable — 46 CFR 98.30

- External examination
- Date of internal examination _____
- Date of hydrostatic test _____
- Metal information plate
- Marking and labeling
- Saddles; foundation and stowage
- Piping and valves
- Relief valves
- Lifting fittings
- Securing devices
- Pump and controls
- Cargo hose
- Electrical grounding
- Firefighting requirements
- Authorized cargo

Notes:_____

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Ground Tackle:

☐ Anchors — 46 CFR 77.07, 46 CFR 96.07

- Tested
- Windlass
- Capstans
  - Automatic tensioning device

☐ Mooring, standing and running gear (other than gear covered by Cargo Gear Certificate) — 46 CFR 91.37-70

Lifesaving Equipment:

NOTE: *Exemptions and alternatives for vessels not subject to SOLAS can be found in 46 CFR 199.600.*

☐ General alarms — 46 CFR 113.25, SOLAS 74/78 III/6.4

- Controls
- Batteries and fuses
- Tested
- Markings
- Bell locations audible

☐ Type of lifeboat

Davit launched

Free fall

☐ Lifeboats stripped, cleaned and inspected — 46 CFR 199.190(f)

- Date of annual servicing _____

☐ Lifeboats and work boats — 46 CFR 199.201, 46 CFR 199.202, 46 CFR 199.261, 46 CFR 199.262, SOLAS 74/78 III/19.2, SOLAS 74/78 III/26, MSM Ch. 6.R.3.e

- Hull and fittings
- Tanks and fittings
- Cradles
- Gripes
- Compressed air cylinders
- Markings — 46 CFR 199.176

Notes: _____

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- ☐ Guards, ladders, rails, and gangways (including accommodation ladders or pilot ladders) — 46 CFR 72.40, 46 CFR 92.25, ICLL 66 Reg. 25
- ☐ Elevators and escalators — 46 CFR 72.05-20, 46 CFR 111.91
- ☐ Watertight doors in subdivision bulkhead tested by: — 46 CFR 170.270
  - Local control by hand
  - Local control by power
  - Remote control by hand
    - Indicators
  - Remote control by power
    - Indicators
- ☐ Cargo gear examined (in absence of Cargo Gear Certificate) — 46 CFR 91.37
  - Records
  - Safe Working Load markings
- ☐ Exercise valves and controls — 46 CFR 78.17-5
  - Bilge valves
  - Overboard discharge valves
  - Equalizing valves
  - Emergency shutoff valves
  - Scupper valves
  - Remote control
  - Reach rods
- ☐ Bilge wells, cofferdams, and suctions — 46 CFR 56.50-50
- ☐ Bulkhead penetrations — MSM Ch. 6.F.6
- ☐ Piping protection — MSM Vol. IV, Ch. 3.G.2.b
  - Removable guards (where required)
  - Cargo hold
  - Baggage spaces

Notes:_____

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Item Number	Item	International Voyage		Short International Voyage	
		Lifeboat	Rescue Boat	Lifeboat	Rescue Boat
29	Signal, smoke	2		2	
30	Signal, hand flare	6		6	
31	Signal, parachute flare	4		4	
32	Skates and fenders[8]	1	1	1	1
33	Sponge[7]		2		2
34	Survival instructions	1		1	
35	Table of lifesaving signals	1		1	
36	Thermal protective aids[9]	10%	10%	10%	10%
37	Tool kit	1		1	
38	Tow line[10]	1	1	1	1
39	Water (liters/person)	3		3	
40	Whistle	1	1	1	1

Footnotes:

1 Each rigid liferaft equipped for 13 persons or more must carry two of these items.
2 Not required for boats of self-bailing design.
3 Not required for inflated or rigid-inflated rescue boats.
4 A hatchet counts towards this requirement in rigid rescue boats.
5 Oars are not required on a free-fall lifeboat; a unit of oars means the number of oars specified by the boat manufacturer.
6 Rescue boats may substitute buoyant paddles for oars, as specified by the manufacturer.
7 Not required for a rigid rescue boat.
8 Required if specified by the boat manufacturer.
9 Sufficient thermal protective aids are required for at least 10% of the persons the survival craft is equipped to carry, but not less than two.
10 Required only if the lifeboat is also the rescue boat.

Notes: _____

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☐ EPIRB (406 MHz) — SOLAS 74/78 IV/7.1.6; 46 CFR 199.510
- Float-free arrangement
- Battery date current
- Hydrostatic release

☐ GMDSS lifeboat radios (VHF) — SOLAS 74/78 III/6.2
- 3 if over 500 GT
- Operable condition

☐ 9 GHz radar transponder (SART) — SOLAS 74/78 III/6.2; NVIC 9-93
- Freight vessels > 300 GT and < 500 require 1
- Freight vessels > 500 GT and passenger vessels require 2
- Stowed so to be rapidly placed in survival craft or stowed in survival craft

☐ NAVTEX — SOLAS 74/78 IV/7.1.4

General Health and Safety:

☐ Hospital and first aid equipment — 46 CFR 72.20-35; 46 CFR 92.20-15

☐ Operating room explosion-proof — 46 CFR 111.105-37

☐ Emergency lighting — 46 CFR 112.43

☐ Protection of spaces specially suited for vehicles — 46 CFR 70.10-44; 46 CFR 90.10-38
- Gas detection systems
- Electrical hazardous locations

☐ Crew and passenger accommodations — 46 CFR 72.20; 46 CFR 72.25; 46 CFR 92.20; MSM Ch. 13.C
- Size
- Lighting and wiring
- Heating
- Ventilation — 46 CFR 92.15-15
- Sanitation
- Screens
- Insulation
- Fire retardant

Notes:_____

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☐ Lifeboat winches — 46 CFR 199.199(i); SOLAS 74/78 III/19; MSM Ch. 6.R.3.a
- Brakes
- Controls
- Cranks
- Covers
- Limit switches and electrical controls

☐ Embarkation aids — 46 CFR 199.190(f); SOLAS 74/78 III/11; MSM Ch. 6.R.3.t
- Ladders
- Access
- Spans and lifelines
- Illumination
- Frapping and tricing lines

☐ Lifeboat weight test — 46 CFR 199.45(b); SOLAS 74/78 III/19; MSM Ch. 6.R.3.a
- Light load
- Full load: date _____

☐ Liferafts — 46 CFR 199.190; SOLAS 74/78 III/19; SOLAS 74/78 III/26; MSM Ch. 6.R.3.f
- Launching instructions posted
- Equipment and stowage
- Annual service dates — 46 CFR 199.190(g)

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- Hydro release service dates — 46 CFR 199.190(h); MSM Ch. 6.R.3.h

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- Weak link
- Float free
- Illumination
- Markings
- Capacities
- Launching devices tested — MSM Ch. 6.R.3.d

Notes: _____

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Section 3: Inspection Items

Navigation Equipment:

- ☐ Navigation publications (as applicable) — 33 CFR 164.33, SOLAS 74/78 V/20
  - Current and corrected charts
  - U.S. Coast Pilot
  - Great Lakes Pilot
  - Sailing directions
  - Coast Guard Light List
  - Notice to mariners
  - Tide tables
  - Tidal current tables
  - International Rules of the Road
  - Inland Rules of the Road
- ☐ Operationally test radar(s) and ARPA — 33 CFR 164.35, 33 CFR 164.37, 33 CFR 164.38, SOLAS 74/78 V/12
  - 2 required if over 10,000 GT
  - Operate independently
  - ARPA acquires targets
- ☐ Compasses — 33 CFR 164.35, SOLAS 74/78 V/12
  - Illuminated gyrocompass with repeater at stand
  - Illuminated magnetic compass
  - Current deviation table
- ☐ Test electronic depth sounding device and recorder — 33 CFR 164.35, SOLAS 74/78 V/12
  - Accurate readout
  - Test all transducers
  - Continuous recorder (chart)
- ☐ Speed and distance indicator — 33 CFR 164.40, SOLAS 74/78 V/12
- ☐ Propulsion shaft tachometer — SOLAS 74/78 V/12

Notes: _____

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- ☐ Placard of lifesaving signals — 46 CFR 97.43, SOLAS 74/78 V/16
- ☐ Pilot ladder and hoists in good condition — SOLAS 74/78 V/17, MSM Ch. 6.R.3.t, MSM Ch. 6.R.3.u
- ☐ Station bill posted — 46 CFR 199.80, SOLAS 74/78 III/8.3

Fire Protection Equipment:

- ☐ Fire control plan — 46 CFR 78.45-1, 46 CFR 97.36-1, SOLAS 74/78 II-2/20
  - Permanently posted
  - Copy permanently stored in weathertight container outside deckhouse
- ☐ Patrol system — 46 CFR 78.30-10, 46 CFR 78.30-15, 46 CFR 95.05-1
  - Stations properly numbered and sealed
  - Key clock charts
- ☐ Fire detection systems — 46 CFR 76.05-1, 46 CFR 95.05-1, SOLAS 74/78 II-2/13, SOLAS 74/78 II-2/11.8, SOLAS 74/78 II-2/53, NVIC 7-80
  - Smoke / fire alarms
  - Remote pull stations
  - Smoke / flame / heat detectors and sensors
- ☐ Portable extinguishers — 46 CFR 76.50, 46 CFR 95.50, SOLAS 74/78 II-2/6, SOLAS 74/78 II-2/21, MSM Ch. 18.I.3, NVIC 7-70, NVIC 13-86
  - Serviced annually
  - Bottles hydrostatically tested (every 5 years)
  - Markings (weight and hydrostatic test date)
  - Spare charges, spare extinguishers
- ☐ Semiportable extinguishers — 46 CFR 76.50, 46 CFR 95.50, SOLAS 74/78 II-2/6, SOLAS 74/78 II-2/21, MSM Ch. 18.I.4
  - Serviced annually
  - Bottles hydrostatically tested (every 12 years)
  - Controls, instructions, markings
  - Hose and diffuser
  - Flexible loops tested or replaced (same as bottle)

Notes: _____

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Logs and Manuals:

- ☐ Lifesaving equipment maintenance record — 46 CFR 199.190(e); SOLAS 74/78 III/19
  - Periodic checks as required
  - Visual inspection of survival craft / rescue boat and launching appliances
  - Operation of lifeboat / rescue boat engines
  - Lifesaving appliances, including lifeboat equipment examined
- ☐ Emergency training and drills — SOLAS 74/78 III/18
  - Onboard training in use of lifesaving equipment (all crew members)
  - SOLAS training manual
  - Logbook records — 46 CFR 199.180; SOLAS 74/78 III/18.5
  - Fire and lifeboat drills — SOLAS 74/78 III/25
  - General alarm tested
- ☐ Bridge log — SOLAS 74/78 V/19; STCW 95 I/14; 33 CFR 164.25; 33 CFR 164.53
  - Pre-arrival tests conducted
  - Casualties (navigation equipment and steering gear failures reported)
  - Steering gear drills — 46 CFR 97.35
  - Emergency steering drills
- ☐ Stability information — 46 CFR 78.17-20; 46 CFR 97.15-5; SOLAS 74/78 II-1/22.1
- ☐ Information available to master (as required) — 46 CFR 78.17-22; 46 CFR 97.12-1
  - Loading manual
  - Trim and stability book

Pollution Prevention Records:

- ☐ Oil record book (Part 1) — MARPOL Ax. I/20; 33 CFR 151.25
  - Each operation signed by person-in-charge
  - Each complete page signed by master
  - Book maintained for 3 years

Notes:_____

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- ☐ Passenger vessels: structural fire protection — 46 CFR 72.05; SOLAS 74/78 II-2/23
  - Draft stops
  - Fire dampers
  - Bulkheads
  - Insulation
  - Ventilation
  - Penetrations
- ☐ Cargo and miscellaneous vessels: structural fire protection — 46 CFR 92.07; SOLAS 74/78 II-2/42
  - Bulkheads
  - Insulation
- ☐ Fire doors and controls tested — 46 CFR 72.05-25; 46 CFR 92.07-10; SOLAS 74/78 II-2/46; SOLAS 74/78 II-2/47
  - Machinery space and stair towers
  - Not tied or blocked open
  - Installed closure devices working
- ☐ Remote controls to power ventilation marked and tested — 46 CFR 111.103-1
- ☐ Closures for spaces protected by fixed smothering systems — 46 CFR 76.15-35; 46 CFR 95.15-35
- ☐ International shore connection — 46 CFR 76.10-10(c); 46 CFR 95.10-10(c); SOLAS 74/78 II-2/19

Pollution Prevention:

- ☐ Pollution placard posted — 33 CFR 155.450
- ☐ MARPOL V placard posted — 33 CFR 151.59
- ☐ Person-in-charge designation — 33 CFR 155.700

Notes: _____

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Name of Certificate	Issuing Agency	ID #	Port Issued	Issue Date	Exp. Date	Endors. Date
Passenger Ship Safety (PSS) No Change						
International Load Line (ILL) No Change						
International Oil Pollution Prevention (IOPP) No Change						
International Tonnage (ITC) No Change						
Safety Management (SMC) No Change						
Document of Compliance(DOC) No Change						

Section 4: Drills

☐ Fire Drill:

Initial notifications	Familiarity with duties	Space isolation
General alarms / signals	Familiarity with equipment	Smoke control
Crew response	Fire pumps started	Arrange care of passengers
Properly dressed / equipped	Two jets of water	Communications w/ bridge
Language understood by crew	Fire doors and dampers	

(SOLAS 74/78 III/18.3; MSM Vol. II/22.C.7.i; NVIC 6-91)

Location: _____ Time on Scene: _____

Notes: _____

Vessel Information:

Classification Society
ISM Issuer: Same as above? Yes No If not the same, which Recognized Organization? _____ ***NOTE:*** *The period of validity for ISM documents should correspond to the following list. If they do NOT, ISM documents should be further investigated.* ☐ *5 years = Full term (SMS and DOC)* ☐ *12 months = Interim (DOC)* ☐ *6 months = Interim (SMC)* ☐ *5 months = Short term (SMC)*

Gross Tons	No Change (VFMD)
Net Tons	No Change (VFMD)
Built Date (use delivery date)	No Change (VFCD)
Overall Length (in feet)	No Change (VFMD)

Vessel Description:

Container Vessel
Vehicle Carrier
Bulk Carrier
Passenger Vessel
Research Vessel
School Ship
Other _____

Section 5: Appendices

Recommended US Vessel Deficiency Procedures:

Step	Action
1	Identify deficiency.
2	Inform vessel representative.
3	Record on the *Deficiency Summary Worksheet* (next page).
4	If deficiency is corrected prior to end of inspection, go to Step 7.
5	If deficiency is unable to be corrected prior to end of inspection, issue CG-835 in accordance with table below.
6	Enter CG-835 data in MIDR.
7	Enter deficiency data in MSDS.
8	Initiate Report of Violation (ROV) if necessary.

IF deficiency:	**THEN issue CG-835:**
Does NOT immediately impact crew/passenger safety, hull seaworthiness, or the environment, e.g., • Missing placards • Non-metallic expansion joints more than 10 years in service	That provides a specific time for correcting deficiency, e.g., • "X" number of days • At next drydock
Allows vessel operations to be MODIFIED to meet less stringent requirements, e.g., • Expired international certificates • Automation defect • Insufficient lifesaving equipment	That restricts operation of vessel to meet current vessel conditions, e.g., • Reduced route • Increased crew • Fewer passengers
DOES immediately impact crew/passenger safety, hull seaworthiness, or the environment, and cannot be modified to meet less stringent requirements, e.g., • Missing or defective firefighting equipment • Structural defect or damage	That requires the deficiency to be corrected prior to operating vessel ("NO SAIL" item), e.g., • Prior to carrying passengers • Prior to carrying cargo

Section 1: Administrative Items

IMO Applicability Dates:

Reference	Date
SOLAS 1960	26 MAY 65
SOLAS 1974	25 MAY 80
1978 Protocol to SOLAS 1974	01 MAY 81
1981 Amendments (II-1 & II-2)	01 SEP 84
1983 Amendments (III)	01 JUL 86
Various additional amendments to SOLAS	
MARPOL 73/78 Annex I	02 OCT 83
MARPOL 73/78 Annex II	06 APR 87
MARPOL 73/78 Annex III	01 JUL 92
MARPOL 73/78 Annex V	31 DEC 88
IBC Code	After 01 JUL 86
BCH Code	Prior to 01 JUL 86
COLREGS 1972	15 JUL 77
Various additional amendments to COLREGS	
Load Line 1966	21 JUL 68
STCW 1978	28 APR 84
1991 Amendments	01 DEC 92
1994 Amendments	01 JAN 96
1995 Amendments	01 FEB 97

Deficiency	MSIS Code	Req't. Issued / Date Completed

Deficiencies identified should be listed with MSIS codes. At completion of inspection/examination, any outstanding deficiencies shall be entered in MIDR or PSDR as appropriate. All deficiencies found (outstanding and completed) shall be entered in the Deficiency Summary. Worklist items, which serve only as memory joggers to complete inspection/examination (e.g., test emergency fire pump), should not be coded as deficiencies.

MSIS Codes for Deficiencies:

BS	Ballast	**DC**	Dry Cargo	**IC**	I/C Engine
BI	Bilge	**ES**	Electrical	**LS**	Lifesaving
BA	Boiler, Aux.	**FF**	Firefighting	**MI**	Miscellaneous
BM	Boiler, Main	**FL**	Fuel	**NS**	Navigation
CS	Cargo	**GS**	General Safety	**PP**	Propulsion
DM	Deck Machinery	**HA**	Habitation	**SS**	Steering
DL	Doc., Lics., Pmts.	**HU**	Hull		

Notes:

Total Time Spent Per Activity:

Regular Personnel (Active Duty)			
ACTIVITY TYPE	ACTIVITY	TRAINING	(PERS) MI

TOTAL ADMIN HOURS	TOTAL TRAVEL HOURS

Reserve Personnel			
ACTIVITY TYPE	ACTIVITY	TRAINING	(PERS) MI

TOTAL ADMIN HOURS	TOTAL TRAVEL HOURS

Auxiliary Resources	
TOTAL BOAT HOURS	TOTAL AIRCRAFT HOURS

Conversions:

Distance and Energy				
Kilowatts (kW)	X	1.341	=	Horsepower (hp)
Feet (ft)	X	3.281	=	Meters (m)
Long Ton (LT)	X	.98421	=	Metric Ton (t)

Liquid (***NOTE:*** *Values are approximate.)*

Liquid	bbl/LT	m^3/t	bbl/m^3	bbl/t
Freshwater	6.40	1.00	6.29	6.29
Saltwater	6.24	.975	6.13	5.98
Heavy Oil	6.77	1.06	6.66	7.06
DFM	6.60	1.19	7.48	8.91
Lube Oil	7.66	1.20	7.54	9.05

Weight

1 Long Ton	=	2240 lbs	1 Metric Ton	=	2204 lbs
1 Short Ton	=	2000 lbs	1 Cubic Foot	=	7.48 gal
1 Barrel (oil)	=	5.61 ft = 42 gal = 6.29 m^3	1 psi	=	.06895 Bar = 2.3106 ft of water

Temperature: Fahrenheit = Celsius (°F = 9/5 °C + 32 and °C = 5/9 (°F – 32))

0	=	-17.8	80	=	26.7	200	=	93.3
32	=	0	90	=	32.2	250	=	121.1
40	=	4.4	100	=	37.8	300	=	148.9
50	=	10.0	110	=	43.3	400	=	204.4
60	=	15.6	120	=	48.9	500	=	260
70	=	21.1	150	=	65.6	1000	=	537.8

Pressure: Bars = Pounds per square inch

1 Bar	=	14.5 psi	5 Bars	=	72.5 psi	9 Bars	=	130.5 psi
2 bars	=	29.0 psi	6 Bars	=	87.0 psi	10 Bars	=	145.0 psi
3 Bars	=	43.5 psi	7 Bars	=	101.5 psi			
4 Bars	=	58.0 psi	8 Bars	=	116.0 psi			